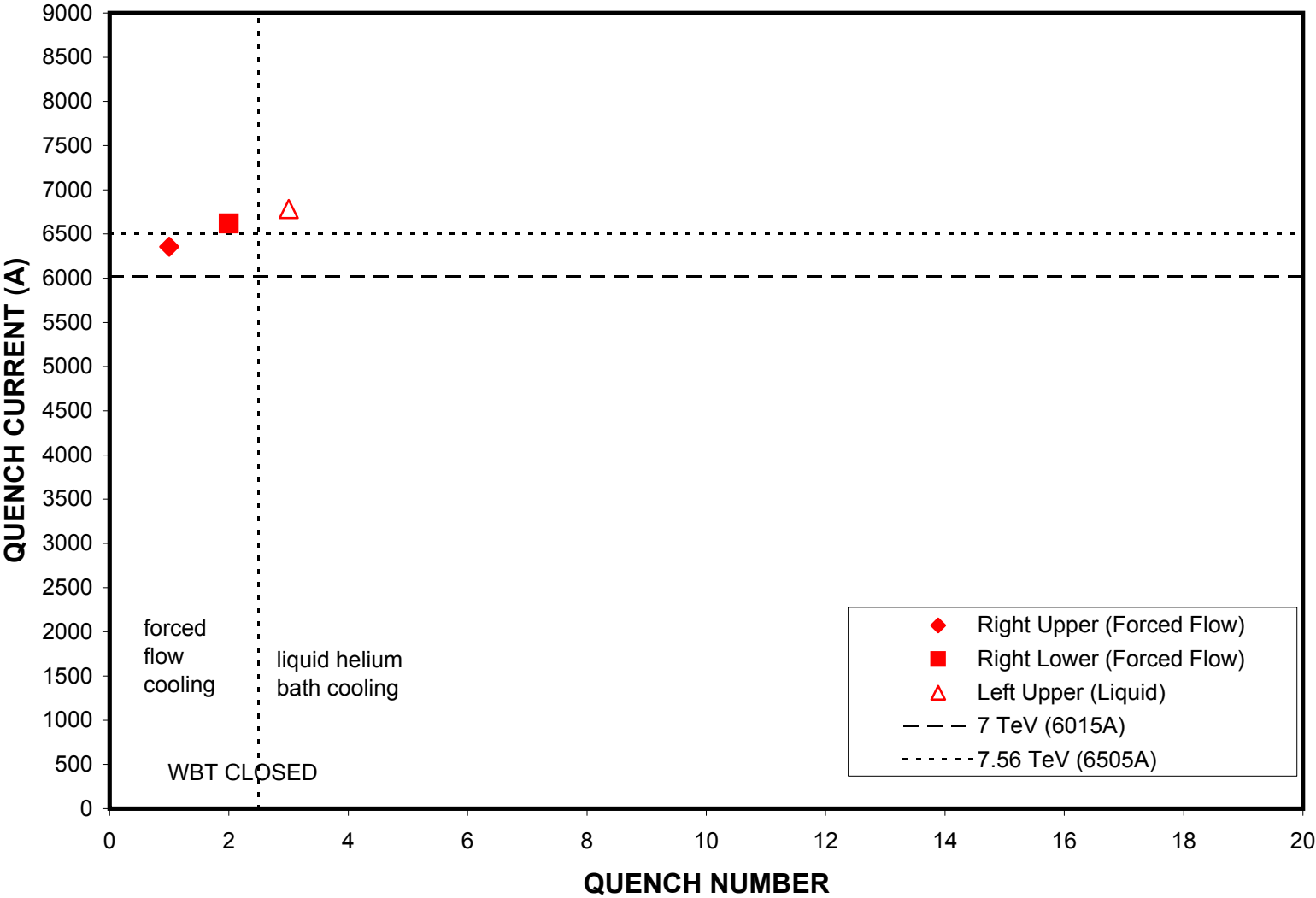


D2L108 QUENCH TESTS



20-Oct-2003
J. F. Muratore
Brookhaven National Lab

D2L108 QUENCH SUMMARY

Magcool Bay C

QUENCH #	RUN #	CURRENT (A)	T1 (K)	T3 (K)	START (ms)	MIITS	COIL	COMMENTS
T = 4.5K (nom)								
Warm bore tubes installed, sealed, and under vacuum								
Forced flow cooling @ 12atm								
1	17	6355	4.526	5.070	-34	9.2	upper right	
2	18	6619	4.574	5.155	-22	9.1	lower right	
Warm bore tubes open								
Magnetic field measurements to 6400A with no quenches								
Switched to liquid helium bath cooling @ 1.4atm								
Warm bore tubes sealed and under vacuum								
3	56	6781	4.543	4.539	-17	7.8	upper left	

Notes:

- a) Ramp rate for quenches was 20A/s.
- b) Energy extraction used: 35mohms for all quenches.
- c) The temperature T1 is a diode sensor located in the helium return line tube which contains the superconducting bus; T3 is in the lower lead interconnect pot. Both have associated redundant sensors.
- d) There were no auxiliary voltage taps in the magnet coils.
- e) Data acquisition sampling rate was 1kHz for all quenches.
- f) Strip heaters were fired at 475V (nom) and 96A (nom), with 1ms delay.
- g) For all quenches, the voltage difference quench detector threshold voltage was set at 0.6V.
- h) For quenches #2 and #3, some voltage spikes were seen prior to the quench but not at the quench start.